

ABSTRACT

An in-line formed, non-laminated web is suitable for use as a composite fluid distribution and fluid retention layer in a disposable absorbent article. The web can be formed by selective deposition of airlaid materials including absorbents, such as pulp and superabsorbents, together with binder fibers. The web so constructed will have a plurality of intermingled lower basis weight areas and higher basis weight areas coexisting and distributed in at least a central region of the web, the alternations crossing the X axis or Y axis, or both, of the web, with the higher basis weight areas being a greater thickness in the Z-direction than the lower basis weight areas. The web so constructed will further have no discrete material boundaries between the lower basis weight stripes and the higher basis weight stripes. Further the necessity of later processing on the web to achieve a ridged structure is removed and the fibers will remain whole and undisturbed. The selective vacuum manipulation in conjunction with multiple fiber deposition heads, and appropriate timing of fiber addition therefrom, will yield a variety of useful composite webs having multiple layers thereby forming an economical single web which may be easily incorporated into an absorbent garment or article.